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Claim Amendments

Please amend claims 1-12 as follows:

Please cancel claims 13-22 as follows:

Please add new claims 23-30 as follows:

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Listing of Claims

1. (currently amended) A thrust pad assembly for mounting a substrate in an electroplating system, comprising:

a contact ring ~~for~~ adapted to electrically ~~connection~~ to the electroplating system and ~~engaging~~ a backside non-plating surface of the substrate; and

a variable pressure application system adapted to operably ~~engaging~~ said contact ring, said variable pressure application system adapted for to applying a central pressure to a center region of the substrate backside through said contact ring and a peripheral pressure less than said central pressure to an edge region of the substrate backside through said contact ring.

2. (currently amended) The thrust pad assembly of claim 1 further comprising a thrust pad adapted to engage[[d]] by said variable pressure application system and engaging said contact ring ~~for to~~ transmitting said central pressure and said peripheral pressure to said contact ring.

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3. (currently amended) The thrust pad assembly of claim 1 wherein said variable pressure application system comprises a central air source ~~for~~ adapted to applying said central pressure to the center region of the substrate backside through said contact ring and a peripheral air source ~~for~~ adapted to applying said peripheral pressure to the edge region of the substrate backside through said contact ring.

4. (currently amended) The thrust pad assembly of claim 3 further comprising a thrust pad adapted to engage[[d]] by said variable pressure application system and engaging said contact ring ~~for~~ to transmitting said central pressure and said peripheral pressure to said contact ring.

5. (currently amended) The thrust pad assembly of claim 3 further comprising a platen having a plurality of central air openings provided in pneumatic communication with said central air source and a plurality of peripheral air openings provided in pneumatic communication with said peripheral air source, said central openings adapted to ~~for~~ transmitting said central pressure to the contact ring and the center region of the substrate backside and said peripheral air openings adapted to transmit said peripheral pressure to the contact ring and the edge region of the substrate

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backside.

6. (currently amended) The thrust pad assembly of claim 5 further comprising a thrust pad adapted to engage said contact ring, said thrust pad and adapted to be engaged by said ~~air~~ platen for to transmitting said center pressure and said peripheral pressure to said contact ring.

7. (currently amended) An electroplating system for electroplating a metal on a substrate, comprising:

a bath container ~~for~~ adapted to containing an electrolyte bath;

an anode adapted for immersion in said electrolyte bath;

a current source ~~for~~ adapted to electrically connection to said anode;

a contact ring electrically connected to said current source, said contact ring adapted to ~~for~~ engaging a backside non-plating surface of the substrate; and

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a variable pressure application system adapted to operably engage~~ing~~ said contact ring, said variable pressure application system for adapted to applying a central pressure to a center region of the substrate backside through said contact ring and adapted to apply a peripheral pressure less than said central pressure to an edge region of the substrate backside through said contact ring.

8. (currently amended) The system of claim 7 further comprising a thrust pad adapted to be engaged by said variable pressure application system and adapted to engage~~ing~~ said contact ring ~~for~~ to transmitting said central pressure and said peripheral pressure to said contact ring.

9. (currently amended) The system of claim 7 wherein said variable pressure application system comprises a central air source ~~for~~ adapted to apply~~ing~~ said central pressure to the center region of the substrate backside through said contact ring and a peripheral air source ~~for~~ adapted to apply~~ing~~ said peripheral pressure to the edge region of the substrate backside through said contact ring.

10. (currently amended) The system of claim 9 further comprising

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a thrust pad adapted to be engaged by said variable pressure application system and adapted to engageing said contact ring ~~for~~ to transmitting said central pressure and said peripheral pressure to said contact ring.

11. (currently amended) The system of claim 9 further comprising a platen having a plurality of central air openings provided in pneumatic communication with said central air source and a plurality of peripheral air openings provided in pneumatic communication with said peripheral air source, said central openings adapted to ~~for~~ transmitting said central pressure to the contact ring and the center region of the substrate backside and said peripheral air openings adapted to transmit said peripheral pressure to the contact ring and the edge region of the substrate backside.

12. (currently amended) The system of claim 11 further comprising a thrust pad adapted to be engaged by said variable pressure application system and adapted to engageing said contact ring ~~for~~ to transmitting said central pressure and said peripheral pressure to said contact ring.

Claims 13-22 (canceled)

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23. (new) The thrust pad assembly of claim 1 wherein said central pressure is greater than about 14 psi and said peripheral pressure is less than about 14 psi.

24. (new) The system of claim 7 wherein said central pressure is greater than about 14 psi and said peripheral pressure is less than about 14 psi.

25. (new) The system of claim 7 wherein said anode comprises copper.

26. (new) An electroplating system for preferentially electroplating a metal on a substrate, comprising:

a bath container adapted to contain an electrolyte bath;

an anode adapted for immersion in said electrolyte bath;

a current source adapted to electrically connect to said anode;

a contact ring electrically connected to said current

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source, said contact ring adapted to engage a backside non-plating surface of the substrate; and

a variable pressure application system comprising a thrust pad adapted to operably engage said contact ring, said variable pressure application system adapted to apply a central pressure to a center region of the substrate backside through said thrust pad and said contact ring and adapted to apply a peripheral pressure less than said central pressure to an edge region of the substrate backside through said thrust pad and said contact ring, such that metal is preferentially electroplated on a frontside center region of said substrate.

27. (new) The electroplating system of claim 26 wherein said variable pressure application system comprises a central air source adapted to apply said central pressure to the center region of the substrate backside through said thrust pad and said contact ring and a peripheral air source adapted to apply said peripheral pressure to the edge region of the substrate backside through said thrust pad and said contact ring.

28. (new) The electroplating system of claim 26 further comprising a platen having a plurality of central air openings



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provided in pneumatic communication with said central air source and a plurality of peripheral air openings provided in pneumatic communication with said peripheral air source, said central openings adapted to transmit said central pressure through the thrust pad and the contact ring to the center region of the substrate backside and said peripheral air openings adapted to transmit said peripheral pressure through the thrust pad and contact ring to the edge region of the substrate backside.

29. (new) The electroplating system of claim 26 wherein said central pressure is greater than about 14 psi and said peripheral pressure is less than about 14 psi.

30. (new) The electroplating system of claim 26 wherein said anode comprises copper.